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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,662	09/22/2001	Robert H. Gore	50773	5996

7590

06/18/2003

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EXAMINER

ZALUKAEVA, TATYANA

ART UNIT

PAPER NUMBER

1713

DATE MAILED: 06/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,662

Applicant(s)

GORE ET AL.

Examiner

Tatyana Zalukaeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 10-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-9 in Paper No. 5, and species of "alkyl (meth)acrylate as a comonomer, and trimethylolpropane trimethacrylate as a crosslinker in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the polymers of claim 10 cannot be obtained by a process other than that described in Group I, and that there is no serious burden to search for a dielectric composition comprising such particles, as well as for dielectric material and electronic device. This is not found persuasive because particles of claim 10, although are claimed as being solution polymer particles can be still produced by a variety of materially different processes, such as sequential feed, batch feed, discontinuous feed, etc, and a variety of polymerization techniques involving catalysts and polymerization aids. With regard to alleged absence of undue burden, it is noted that the consideration of undue burden is one that must be made by the Examiner, Applicants' arguments that the search of one invention must necessarily result in a search of the other one has been considered, but is not persuasive insofar as the searches are not co-extensive and additional search would of necessity, be required for the combination of inventions.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims readable on elected species are 1-7 and 9.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Allen et al (U.S. 6,420,441)

Allen discloses a method of making crosslinked polymer particles by solution polymerization, which is precisely described in Examples 1 and 2, col. 15 and 16. The methyl Methacrylate (MMA) is a main comonomer, and diethylene glycol dimethacrylate is a crosslinking comonomer. In example 1 monomer feed was mixed with initiator feed (col. 16, lines 1,2), the polymerization itself is performed via two feeds, the second chaser feed comprises the initiator and solvent (col. 16, lines 10-13). In example 2.

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reactor with solvent was heated up to appropriate temperature sufficient to activate the initiator, and then two feeds of monomers and initiator in the solvent were added. The porogen particles formed after reaction had particle size distribution from 0.8 to 5 nm with the mean of 1.4 nm (col. 16, lines 55-61). A variety of crosslinking comonomers are disclosed by Allen; among them is TMPTMA, trimethylolpropane trimethacrylate is named in col. 8, line 36.

With regard to a limitation that the monomer feed and initiator feed are added to the reactor at such a rate that the concentration of one or more monomers in one or more solvents is substantially constant, two aspects are noted here:

- a) since claims 1 and 2 allow the monomer feed and initiator feed be combined together, then addition of such combination to a fixed amount of solvent (such as made in Example 2 of Allen) would have maintained the concentration of monomer(s) constant;
- b) It is axiomatic that one who performs the steps of a process must necessarily produce all of its advantages. Mere recitation of a newly discovered function that is inherently possessed by the things or steps in the prior art does not cause a claim drawn to those things to distinguish over the prior art *Leinoff v. Louis Milona & Sons, Inc.* 220 USPQ 845 (CAFC 1984)

With specific regard to claim 2 it is also noted that Allen's mixtures are prepared prior to adding them to the reactor, and furthermore, it is the commonest of expedients to mix certain ingredients together before they are mixed into main article to be

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produced. This is so well understood in many arts, as to require no extended discussion. Anyone making this mixture would follow one of four steps (order of addition) and it would be merely a matter of choice and within the skill of the art to adopt such procedure as it found most satisfactory. The results did not differ in any way, In re Hempel, 74 USPQ 171-173 (CCPA 1947).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other prior art shows the polymers and porogens comprising crosslinked solution polymer particles.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703) 308-8819. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.


TATYANA ZALUKAEVA
PRIMARY EXAMINER

June 10, 2003